

Spring 2009

The Newest Hybrid: Notes Toward Standardized Certification of Carbon Offsets

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The Newest Hybrid: Notes Toward Standardized Certification of Carbon Offsets

Cover Page Footnote

International Law; Commercial Law; Law

THE NEWEST HYBRID: NOTES TOWARD STANDARDIZED CERTIFICATION OF CARBON OFFSETS

Maria Savasta-Kennedy†

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Anyone who has booked online an airline flight, a hotel room, or rented a car in the last few years has had the opportunity to

† Clinical Professor of Law, University of North Carolina School of Law. This paper was first presented at a November 2008 symposium sponsored by the North Carolina Journal of International Law and Commercial Regulation, entitled "The Greenhouse Gas Marketplace: Commercial Regulation of Climate Change Solutions." The author wishes to thank Donald Hornstein, Kimberly Krawiek, Eric Muller, Joseph Kennedy, and Victor Platt at the University of North Carolina School of Law for their invaluable comments, Daniel Conrad, Cara Hamaguchi, and Melissa Woods Saltzman for their excellent research assistance, and the editorial staff of the *North Carolina Journal of International Law and Commercial Regulation*. Special thanks goes to Timothy Dodge for his outstanding research assistance and invaluable support throughout this project.

“offset” the greenhouse gas (GHG) pollution generated through their activities by investing in a carbon offset. For example, when booking a flight online with Delta Airlines, Expedia.com, or Travelocity, you have the opportunity to pay an extra twenty-fifty dollars to a third party partner, who will then invest your money into an offset project that will help “erase” the pollution or “carbon footprint” you create by flying to your destination. Your money might fund a wind farm somewhere in the Midwest, methane capture at a landfill in Texas, or reforestation efforts in California.¹ The new stand of trees that your investment funds will purportedly soak up an amount of GHG pollution in the atmosphere roughly equivalent to the amount of GHG pollution you create by flying, say, from New York City to San Francisco. Instead of contributing to global warming, your cross-country flight is now rendered “carbon neutral.” There currently exist carbon neutral football games, baby showers, computer companies—even legislators—all of whom have ostensibly achieved “carbon neutrality” by purchasing offsets as well as (perhaps) by reducing their GHG emissions.² This market is expanding, with an estimated sixty-five million tons sold in the United States in 2007, valued at approximately \$337.3 million.³ That number represents a threefold increase in value from 2006.⁴

In the absence of mandatory federal limits on GHG emissions in the United States, the voluntary market for “offsetting”

¹ Examples of such projects include the Elk River Wind Project in Butler County Kansas; the Waste Management Inc., landfill to methane sites in Austin, TX and San Antonio, TX; and the Pacific Forest Trust Butano Falls Project in San Francisco, CA.

² See, e.g., Balance Your Equation, <http://www.balanceyoureuation.com/what-are-offsets.html> (last visited Mar. 25, 2009) (with a function allowing you to calculate your carbon footprint); see also TerraPass Carbon Balanced Business program, <http://www.terrapass.com/business> (allowing companies to reduce the carbon footprints of their businesses).

³ For a summary of the voluntary markets, see ECOSYSTEM MARKETPLACE & NEW CARBON FINANCE, FORGING A FRONTIER: STATE OF THE VOLUNTARY CARBON MARKETS 2008 21 (2008) [hereinafter FORGING A FRONTIER], available at http://www.ecosystemmarketplace.com/documents/cms_documents/2008_StateofVoluntaryCarbonMarket2.pdf. For a summary of both regulated and voluntary carbon markets, see WORLD BANK, STATE AND TRENDS OF THE CARBON MARKET 2008 (2008), available at <http://siteresources.worldbank.org/NEWS/Resources/State&Trendsformatted06May10pm.pdf>.

⁴ See FORGING A FRONTIER, *supra* note 3.

pollution emissions provides consumers with opportunities to address climate change by ameliorating some of their pollution generating activities. Consumers of offsets include individuals and organizations – including businesses, nonprofits, governments, universities, religious congregations, and others – voluntarily seeking to green up their act. In the case of individuals, like the traveler paying extra money to offset her airline flight from New York to San Francisco, those participating in the voluntary market are seemingly driven by a sense of environmental responsibility and altruism. In the case of organizations and corporate consumers, participation may be motivated by a sense of corporate social responsibility,⁵ a perceived market advantage in claiming voluntary carbon neutrality,⁶ or the potential advantage of pre-compliance (i.e. banking that future legislation will recognize current GHG reduction).⁷

⁵ See *Just Good Business*, THE ECONOMIST, Jan. 17, 2008, available at http://www.economist.com/specialreports/PrinterFriendly.cfm?story_id=10491077 (“The great green awakening is making company after company take a serious look at its own impacts on the environment.”). See also Judd F. Sneirson, *Green is Good: Sustainability, Profitability, and a New Paradigm for Corporate Governance*, 94 IOWA L. REV. 3 (forthcoming in 2009) (debunking the view of corporate governance as responsive only to shareholder profits and presenting a new paradigm for sustainable corporate governance).

⁶ In fact, many companies strategically engage in Corporate Social Responsibility (CSR) to create competitive advantages for themselves. See Michael E. Porter & Mark R. Kramer, *Strategy and Society: the Link Between Competitive Advantage and Corporate Social Responsibility*, HARV. BUS. REV. 78 (2006), available at http://harvardbusinessonline.hbsp.harvard.edu/email./pdfs/Porter_Dec_2006.pdf; see also John M. Conley & Cynthia Williams, *The Corporate Social Responsibility Movement as an Ethnographic Problem*, SSRN Abstract 1285631 (Aug. 2008) (CSR appears to function more as language than substantive action, and may serve merely to co-opt critics, preempt regulation, and mislead consumers), available at http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=55244#reg. But see Graeme Auld, Steven Bernstein, & Benjamin Cashore, *The New Corporate Social Responsibility*, ANN. REV. OF ENV'T & RES., Vol. 33 (Nov. 2008) (exploring the differences between efforts promoting learning and stakeholder engagement from efforts requiring direct behavior changes).

⁷ See, e.g., Lieberman-Warner Climate Security Act of 2008, S.3036, 110th Cong. §§ 2402 & 2502 (2008) (anticipated the use of carbon offsets in meeting emission reduction goals). For a critical look at the limitations of the current movement towards “corporate greening” and CSR, see James Gustave Speth, *The Bridge at the Edge of the World*, in CAPITALISM, THE ENVIRONMENT, & CROSSING FROM CRISIS TO SUSTAINABILITY 174-78 (2008) (“The big gorilla in the room – the main force driving corporate greening

The carbon offset market has provoked strong criticism. Offsets have been labeled by some as papal indulgences that satisfy our guilty conscience while we continue to satiate our thirst for fossil fuel and energy use.⁸ The main point of such criticism is that offsets alone will never succeed in mitigating climate change. And the norms we encourage through public policy are a crucial part of succeeding in mitigating climate change. Individuals in the United States account for approximately one-third of all GHG emissions in the United States – that is more than any one industry source, and accounts for about eight percent of the earth's total GHG emissions.⁹ That eight percent is greater than emissions from all of Africa, Central America and South America combined, and larger than the emissions of every foreign nation, save China.¹⁰ In other words, the U.S. carbon footprint is simply too big to offset. Policies must favor *reducing* emissions, rather than focusing primarily on *offsetting*, which may siphon off dollars and political will from the difficult task of reducing GHG emissions.¹¹

Moreover, while entities and individuals reap the public relations benefit of claiming “carbon neutrality,” it is far from clear what the term means. For example, Dell Computer Company (Dell) recently announced that it had achieved “carbon neutrality” by offsetting its corporate “carbon footprint” through a combination of energy efficiency measures and the purchase of

in the past and in the future- is government action, actual and anticipated, domestic and foreign.”).

⁸ Laurie Al Ristinto, *It's Not Easy Being Green: Reflections on the American Carbon Offset Market*, 8 SUSTAINABLE DEV. & POL'Y 34, (Winter 2008); Andrew C. Revkin, *Carbon-Neutral is Hip, but is it Green?* N.Y. TIMES, April 29, 2007, at 41. See also Kevin Smith, *The Carbon Neutral Myth: Offset Indulgences for Your Climate Sins*, Carbon Trade Watch (2007), http://www.carbontradewatch.org/pubs/carbon_neutral_myth.pdf.

⁹ Michael P. Vandenberg & Anne C. Steinemann, *The Carbon Neutral Individual*, 82 N.Y.U. L. REV. 1673, 1694 (2007) (describing the striking impact of individual U.S. citizen's behavior on GHG emissions and advocating the need for government to address those emissions by “draw[ing] on norms theory and empirical studies to demonstrate how legal reforms can tie the widely held abstract norm of personal responsibility to the emerging concrete norm of carbon neutrality”).

¹⁰ *Id.*

¹¹ *Id.* at 1703.

carbon offsets.¹² However, there exists no uniform definition of carbon footprint against which to measure Dell's claim. In fact, in determining its carbon footprint, Dell did not include the oil used by its suppliers, the fuel used to ship its products to consumers, or the electricity needed to operate its products.¹³ Yet consumers looking to buy a computer might mistakenly conclude that Dell's announced carbon neutrality means that buying a Dell computer will not contribute to climate change.

The focus of this paper is the reliability of the carbon offsets used by Dell and other entities in achieving carbon neutrality and reducing GHG emissions. Specifically, Dell claims that the offsets it purchased "meet the highest standards" that currently exist.¹⁴ In fact, there currently exist at least ten carbon offset protocols and certification programs from which to choose, each with its own set of certification standards.¹⁵ The lack of a single,

¹² Jeffrey Ball, *Green Goal of 'Carbon Neutrality' Hits Limit*, WALL ST. J., Dec. 30, 2008, at A1.

¹³ See *id.*

¹⁴ See *id.* (quoting Dane Parker, Dell Director of Environmental Health and Safety). Even Dell's purported use of the "highest standards" leaves room for doubt as to the claimed efficacy of its offset projects. Dell carbon offset investments range from tree planting through its "Plant a Tree for Me" program, to protection of a threatened forest in Madagascar, to heavy investment in renewable energy through support of wind turbines across the Mid-West. Renewable energy credits (RECs) have been criticized in particular because of claims that the projects would have been funded even without the offset credit investment. For example, the sponsors of one of Dell's offset projects, the Mid-American wind projects in Iowa, have noted that the project is receiving a federal tax credit and would "absolutely" have been built even without Dell's support. The particular offset attribute at issue in the Mid American project is expressed as "additionality," which means that the offset must decrease GHG emissions below quantities that would have been emitted in a business as usual situation. Because of the particular problems associated with determining additionality in the context of renewable energy, many have argued that RECs should not qualify as carbon offsets. Similar concerns confront forestry offsets such as tree planting projects which present permanence issues regarding the survival of the trees. But see Timothy R. Dodge, *Bringing Forests Back into the Fold: Increasing the Role of Forest Offsets in International Efforts to Address Climate Change* (Dec. 5, 2008) (unpublished manuscript, on file with author) (citing the large role of forests in the global carbon cycle and the relative cost-effective nature of forest offsets in relation to other offset options, and proposing the expanded use of forest offsets through improved monitoring, verification, and other risk-reduction measures).

¹⁵ See U.S. GOV'T ACCTBLTY OFFICE, REPORT TO CONG. REQUESTERS, CARBON OFFSETS, THE U.S. MARKET IS GROWING, BUT QUALITY ASSURANCE POSES CHALLENGES FOR MARKET PARTICIPANTS GAO-08-1048, 56-57, app. VII (2008) [hereinafter GAO

standardized certification program for carbon offsets creates consumer confusion and the potential for fraud in the market.¹⁶ A recent Government Accountability Office (GAO) report, released in late September 2008, questions the lack of federal oversight in the U.S. carbon offset market, noting: "The proliferation of standards has caused confusion in the market, and the existence of multiple quality assurance mechanisms with different requirements raises questions about the quality of offsets available on the voluntary market, according to many stakeholders."¹⁷ Moreover, there are conflicting reports on how widespread offset certification is in the retail market, with estimates ranging from eighty-five percent to less than fifty percent.¹⁸ Thus, some number of consumers purchase offsets that have received no certification verifying the reliability of promised GHG reductions.¹⁹

The potential for consumer fraud—or at the least, consumer confusion—undermines the promise of the carbon offset market to help mitigate climate change.²⁰ Yet offsets can comprise an

REPORT]; see also *FORGING A FRONTIER*, *supra* note 3, at 54. There exist a range of quality assurance mechanisms, which are applied at different stages of the carbon offset supply chain, but few if any that cover the entire supply chain. GAO REPORT at 24, 27.

¹⁶ See JONATHAN L. RAMSEUR, *THE ROLE OF OFFSETS IN A GREENHOUSE GAS EMISSIONS CAP-AND-TRADE PROGRAM: POTENTIAL BENEFITS AND CONCERNS*, CONG. RESEARCH SERVICE REPORT TO CONG. 1 (2008), available at <http://fpc.state.gov/documents/organization/103675.pdf>, at 4. "Due to the lack of common standards, some observers have referred to the [voluntary] market as the 'wild west.' This should not suggest that all offsets are low quality, but that the consumer must adopt a buyer-beware mentality when purchasing offsets." See ANJA KOLLMUS, HELGE ZINK, & CLIFFORD POLYCARP, *MAKING SENSE OF THE VOLUNTARY CARBON MARKET, A COMPARISON OF CARBON OFFSET STANDARDS*, STOCKHOLM ENV'T INST. & TRICORONA, WORLD WILDLIFE FUND GERMANY (March 2008) [hereinafter WWF REPORT 2008], available at http://assets.panda.org/downloads/vcm_report_final.pdf, at 34 ("The lack of third-party project verification by a certified and independent auditor is one of the biggest gaps in the current voluntary carbon offset market.").

¹⁷ GAO REPORT, *supra* note 15, at 27.

¹⁸ *Id.* at 24-25.

¹⁹ *Id.* An investigation in 2007 by the Financial Times found "[a] shortage of verification, making it difficult for buyers to assess the true value of carbon credits." Fiona Harvey & Stephen Fidler, *Industry Caught in Carbon 'Smokescreen'*, FINANCIAL TIMES, April 25, 2007, at 1.

²⁰ See STATE OF VERMONT OFFICE OF ATTY. GEN., RESPONSE TO THE REQUEST FOR PUBLIC COMMENT ON THE FTC'S REGULATORY REVIEW OF THE GUIDES FOR THE USE OF ENV'TL MARKETING CLAIMS, cmt. 73 (Jan. 28, 2008) (on behalf of the Attorneys General of Arkansas, California, Connecticut, Delaware, Illinois, Maine, Mississippi, New

important part of GHG reduction strategies. Offset projects create opportunities for innovative responses to GHG emissions by encouraging investment in sectors not required to reduce emissions.²¹ Offsets provide investments for projects that otherwise might not get funding (afforestation, reforestation, agricultural “no till” methods) and incentivize pollution sectors that would not otherwise be covered under mandatory reductions (methane burns at landfills).²² In this way the offset markets operate as a kind of laboratory for testing new methodologies and emission reduction technologies. Given the tremendous potential of the offset market to serve as a catalyst for innovative change and to spur GHG reductions, it is worth examining methods for addressing these consumer protection and market integrity concerns.

This article makes a case for introducing some measure of government oversight into the market and standardizing the certification of carbon offsets. Blending government regulation and the role of private entities in forming and enforcing that certification standard creates the “Newest Hybrid” to which the title of this paper refers. Part I places carbon offsets in the context of current GHG strategies by describing the market and its challenges. Part II looks for insights regarding the regulation of the carbon offset market by investigating the evolution of the organic products market, which progressed from a fragmented,

Hampshire, New Mexico, Oklahoma, and Vermont to the Federal Trade Commission (FTC)), *available at* <http://www.ftc.gov/os/comments/carbonworkshop/533254-00051.pdf> [hereinafter VERMONT OFFICE OF ATTY. GEN.] (lack of common standards and definitions, along with the intangible nature of carbon offsets, makes it difficult for consumers to verify that they are receiving what they paid for and creates a significant potential for deceptive claims); The Financial Times investigation found “[w]idespread instances of people and organizations buying worthless credits that do not yield reductions in carbon emissions.” See Harvey & Fidler, *supra* note 19, and accompanying text.

²¹ Cap-and-trade programs are often limited to large facilities or a single industrial sector of industry. See, e.g., REG. GREENHOUSE GAS INITIATIVE MODEL RULE xx-1.4(a) (Jan. 5, 2007), *available at* http://rggi.org/docs/model_rule_corrected_1_5_07.pdf [hereinafter RGGI MODEL RULE] (applies only to electricity generating facilities with a nameplate capacity equal to or greater than 25 MW). See also Acid Rain Program General Provisions, 40 C.F.R. § 72.6 (2000) (affected units limited to combustion units that meet certain capacity and operation requirements).

²² See RAMSEUR, *supra* note 16, at 3.

multi-standard approach to a uniform system of certification. Part III examines the potential role of market participants in creating and administering a uniform certification standard. Part IV concludes by discussing the need for meaningful government oversight to ensure accountability in standard setting and implementation of uniform certification in the offset market.

I. Carbon Offsets: An Important Piece of the Climate Change Puzzle

In the face of warming temperatures, melting ice caps, rising seas, and extreme weather patterns, climate change has emerged as one of the most urgent problems facing the Obama administration. Policy makers must simultaneously create adaptation mechanisms to deal with the effects of climate change – coastal land loss, migration, disaster relief, increased pressure on our ailing health care infrastructure, habitat and species protection, to name a few – while also implementing measures to drastically cut green house gas emissions to slow the rate of global warming. This paper focuses on the latter challenge – cutting GHG emissions. Specifically, this paper examines the role carbon offsets can play in addressing climate change.

We approach pollution control in the United States through traditional command and control regulation²³ and a range of incentive programs such as the “cap-and-trade” sulfur dioxide (acid rain) market incentive program implemented under the Clean

²³ Generally, the government promulgates “command” regulation limiting pollution emission and “controls” those limitations by penalizing exceedences. *See, e.g.*, Clean Air Act, 42 U.S.C. §§ 7401–7671 (2006). The Clean Air Act was originally enacted in 1963 and amended on numerous occasions, most recently in 1990. *See* Clean Air Act Amendments of 1990, Pub. L. No. 101-549, 104 Stat. 2399 (codified as amended at 42 U.S.C. §§ 6921–7671 (1994)). The 1970 Amendments established the primary command and control regulatory structure, while the 1990 Amendments expanded the scope of regulated emissions and processes, and also provided alternative regulatory and market-based systems. Reducing GHG emissions through the use of a carbon tax is another potential climate change strategy. *See* Victor B. Flatt, *Taking the Legislative Temperature: Which Federal Climate Change Legislative Proposal is “Best”?* 102 N.W. U. L. REV. Colloquy 123, 136 (2007); *see also* John C. Dernbach, *Harnessing Individual Behavior to Address Climate Change: Options for Congress*, 26 VA. ENVTL. L.J. 107, 111–14 (2008) (summary of major bills); *see also* Gilbert E. Metcalf & David A. Weisbach, *Design of a Carbon Tax*, U. OF CHI. L. & ECON., Olin Working Paper No. 447; Public Law Working Paper No. 254; SSRN-id1324854pdf.

Air Act (CAA).²⁴ A cap-and-trade program sets a “cap” or “ceiling” on the amount of a particular pollutant or group of pollutants that an industry may emit in a given time period. Those entities subject to the cap (referred to as “covered” entities) are allotted a certain number of pollution allowances which may be used by the entity or “traded” (i.e. sold) to another covered entity which has exceeded its allotted number of allowances.²⁵ Cap-and-trade programs promote economic efficiency by allowing emitters to determine whether to reduce pollution at their facility or purchase the right to pollute above their limit by paying someone else for their unused allowances.²⁶ These programs work most efficiently when there is a sufficiently stringent cap on overall emissions that creates scarcity in the marketplace.²⁷

Both direct regulation and market-based approaches are currently being tried in various forms across the country. For example, the EPA is litigating whether, and to what extent, it must regulate carbon emissions from autos under the CAA, which is a first step towards federal command and control regulation of GHGs.²⁸ In the fall of 2008, the Regional Green House Gas

²⁴ 42 U.S.C. § 7651 (2006).

²⁵ *Id.*

²⁶ A potential consequence of the cap-and-trade model of pollution reduction is the development of “hot spots,” concentrations of pollution in the communities (which are typically low income communities) that surround major sources of pollution. Hot spots are not presented as a significant danger in the GHG arena because of the nature of the GHG pollutants regulated do not have a localized effect (although non-GHG pollutants associated with these same sources may present a hot spot problem). See Flatt, *supra* note 23, at 136. See also David M. Driesen, *Trading and Its Limits*, 14 PENN. ST. ENVTL. L. REV. 169, 169 (2006).

²⁷ See Leslie K. McAllister, *The Overallocation Problem in Cap-and-Trade: Moving Toward Stringency*, San Diego Legal Stud. Paper No. 08-076 (2008), (forthcoming in the COLUM. J. OF ENVTL. L.).

²⁸ See *Massachusetts v. E.P.A.*, 549 U.S. 497, 528-29, 533 (2007) (holding that carbon dioxide and other GHGs are pollutants under the Clean Air Act, and that EPA has a non-discretionary duty to determine whether GHGs emitted from new motor vehicles endanger public health or welfare and, if so, to either promulgate regulations, or, alternatively, to supply a valid reason for not making such a determination). Following this decision, EPA prepared an “endangerment finding,” but despite repeated efforts by Congress and members of the public to obtain the document, it has not been released. Darren Samuelsohn, *CLIMATE: Bush Admin Rejects Bid to Unseal EPA Endangerment Finding*, GREENWIRE, Jan. 5, 2009, <http://www.eenews.net/public/Greenwire/2009/01/05/4>. The document will likely be released during the Obama Administration, following the change in EPA leadership. *Id.*

Initiative (RGGI) came on line, setting a regional cap on power plant pollution that now regulates over 200 power plants from Maryland to Maine, with a goal of ten percent carbon reductions by 2018.²⁹ Other compliance markets are up and coming.³⁰

One key innovation of compliance markets is the ability to not only trade pollution allowances, but also the ability to meet a portion of pollution reduction through investment in carbon offsets.³¹ Offsets are essentially GHG reduction projects promoted by entities *not* covered by an emission reduction

²⁹ See RGGI Memorandum of Understanding 1-3 (Dec. 20, 2005), *available at* http://rggi.org/docs/mou_12_20_05.pdf (listing CT, DE, MA, ME, NH, NJ NY, RI, and VT as participants and noting scheduled reductions); RGGI Second Amendment to Memorandum of Understanding 1 (Apr. 20, 2007), *available at* http://rggi.org/docs/mou_second_amend.pdf (adding Maryland as a signatory). See generally RGGI Model Rule, *supra* note 21, for regulations respecting the implementation of the agreement in each individual state. See, e.g., 7 DEL. CODE ANN. tit. 7, § 6043-6044 (2008), for an example of a state regulation implementing the Memorandum of Understanding. Under RGGI, five project categories are eligible for CO₂ offset allowances, including: (1) landfill methane capture and destruction; (2) reduction in emissions of sulfur hexafluoride (SF₆); (3) sequestration of carbon due to afforestation; (4) reduction or avoidance of CO₂ emissions from natural gas, oil, or propane end-use combustion due to end-use energy efficiency in the building sector; and (5) avoided methane emissions from agricultural manure management operations. *Id.* § XX-10.5(a)-(f). Under normal conditions, up to 3.3% of an electric generator's emissions may be met with approved offsets, but this limit on the use of offsets may be increased up to 10% if the RGGI CO₂ allowance price exceeds certain threshold values. *Id.* § XX-6.5(a)(3). See also *id.* §§ XX-1.2(bc) and (bd) (defining the threshold CO₂ allowance prices for a stage-one or stage-two event that would allow the increased use of offsets for compliance).

³⁰ The Western Climate Initiative, which includes Arizona, California, New Mexico, Oregon, Utah, and Washington, as well as the Canadian provinces of British Columbia, Manitoba, Ontario and Quebec, was formed in February, 2007, and could reach a cap of approximately one billion tons by 2020, if implemented. The Midwestern Greenhouse Gas Accord was signed in November, 2007, by Illinois, Iowa, Kansas, Michigan, Minnesota, Wisconsin, and Manitoba. The program is intended to start in 2012 and will incorporate a regional cap-and-trade system covering a majority of the sectors of the economy. Internationally, the federal governments of Australia and Canada recently released a federal economy-wide cap-and-trade scheme covering all six Kyoto gases. OFFICE OF INNOVATION, THE BANK OF N.Y. MELLON, TOWARDS A COMMON CARBON CURRENCY: EXPLORING THE PROSPECTS FOR INTEGRATED GLOBAL CARBON MARKETS 12 (2008) [hereinafter MELLON REPORT], *available at* <http://www.bnymellon.com/news/commentaries/issuerservices/carbonmarkets.pdf>.

³¹ See RAMSEUR, *supra* note 16, at 1 ("If a cap-and-trade program includes offsets, regulated entities have the opportunity to purchase them to help meet compliance obligations.").

program.³² Thus, in addition to actually reducing pollution or purchasing allowances from other covered entities, cap-and-trade participants can meet a portion of their obligation by paying another entity to reduce *its* emissions when that entity otherwise would not be required to do so.³³ For example, under a carbon emissions cap-and-trade scheme, a coal burning power plant located in Tennessee might find that it makes greater economic sense to fund a methane burn project at a landfill in Texas, rather than investing in additional pollution control equipment at the Tennessee power plant.³⁴ Methane gas is an unregulated byproduct of landfills, and, absent funding as an offset project, there exists little incentive to dispose of the methane by burning it as an energy source.³⁵ Funding the offset project thus achieves a reduction in the total GHG released into the atmosphere *and* encourages investments in sectors not required to reduce GHG emissions.³⁶

The voluntary carbon offset market in the United States has grown up in the absence of any federal cap on GHG emissions and without the benefit of a national compliance market.³⁷ There are two distinct aspects of this voluntary carbon offset market: the Chicago Climate Exchange (CCX) and the over the counter retail market.³⁸ CCX is a voluntary pollution reduction and trading

³² *Id.*

³³ *Id.* at 3.

³⁴ See *id.* (noting that a regulated entity may consider purchasing offsets if the offsets are less expensive than making direct, onsite emissions reductions). Of course, reducing emissions from the Tennessee power plant would create additional environmental and health benefits for people living and working near the power plant. While GHG is not a localized problem, the collateral harm caused by other pollutants at the plant, such as sulfur dioxide, nitrogen dioxide, mercury, and particle pollution, will not be addressed by shifting pollution control to a landfill in Texas.

³⁵ See *id.* ("When offsets are not allowed, incentives to reduce emissions or sequester carbon are limited to the covered sources, and there is little motivation to improve mitigation technologies for non-covered sources. Including offsets in a cap-and-trade program would expand these incentives.").

³⁶ *Id.*

³⁷ See FORGING A FRONTIER, *supra* note 3, at 21 ("The United States did not ratify the Kyoto Protocol, and the federal government does not currently regulate carbon dioxide . . . or any other GHGs regulated under Kyoto as climate change-related pollutants.").

³⁸ *Id.* at 17.

system through which members make legally binding commitments to reduce their emissions under an emissions cap.³⁹ The exchange currently boasts about 350 members, ranging from businesses such as Dupont and Motorola, to the cities of Oakland and Chicago, and to universities such as the University of California and the University of Minnesota, and organizations like the National Farmers Union and AMTRAK.⁴⁰ CCX participants may trade offsets registered for sale on CCX and verified by approved third party firms specializing in particular fields.⁴¹

The over-the-counter retail market consists of a wide range of voluntary transactions not driven by any sort of emissions cap.⁴² As described above, participants include individuals and organizations interested in offsetting their GHG emissions, as well as those preparing for upcoming regulation and looking for pre-compliance opportunities.⁴³ In 2007, individual consumers made up only 5% of the market, with private, public interest, and government entities accounting for the rest.⁴⁴ Interestingly, foreign entities made up the largest share of the market, even though offsets originating in the United States do not satisfy any reduction requirements under international treaties such as the Kyoto Protocol.⁴⁵ Offsets generated in the United States also

³⁹ *Id.*

⁴⁰ Members of the CCX, <http://www.chicagoclimateexchange.com> (follow "Member List" hyperlink) (last visited Mar. 25, 2009).

⁴¹ See Offset Project Verification, <http://www.chicagoclimateexchange.com/content.jsf?id=102> (last visited Mar. 25, 2009) (listing nine approved verification categories and over ninety approved verifiers). CCX offset projects undergo an initial verification process, as well as annual verification during their enrollment in CCX. *Id.* The verification reports are initially prepared by approved verifiers, and are later reviewed by CCX staff and the Financial Industry Regulatory Authority (FINRA). *Id.*

⁴² FORGING A FRONTIER, *supra* note 3, at 18.

⁴³ *Id.*

⁴⁴ See *id.* at 66 (noting individuals and NGOs purchased 5% and 13% of credits transacted in 2007, respectively); THE WORLD BANK, STATE AND TRENDS OF THE CARBON MARKET 2008 23 (2008) [hereinafter WORLD BANK REPORT] (noting private companies accounted for 79% of the volume of credits transacted in 2007).

⁴⁵ See FORGING A FRONTIER, *supra* note 3, at 67 (noting that the greatest share of purchasers of carbon offsets from a single region hailed from the European Union). See generally Kyoto Protocol to the United Nations Framework Convention on Climate Change arts. 3, 6, 12, 17, Dec. 10, 1997, 37 I.L.M. 22, 24-27 (entered into force Feb. 15, 2005) [hereinafter Kyoto Protocol] (establishing 1990 as the baseline year for the Parties to use in developing their GHG-reduction targets and describing the mechanisms to give

cannot be sold in the European Union Emissions Trading Scheme (ETS), the Kyoto Protocol compliance market that is currently the largest carbon market trading platform in the world.⁴⁶

While 71% of the credits sold in 2006 were purchased by buyers in North America, this number dropped to 34% in 2007.⁴⁷ European voluntary buyers, however, accounted for 47% of the volume of credits bought in 2007, which represents a marked increase of 19% from 2006.⁴⁸ Buyers in Australia and New Zealand similarly increased their participation over the same period, jumping from 1% to 8%.⁴⁹ Whether fueled by altruism, the desire to appear altruistic, or other motivations, the voluntary market has grown exponentially in satisfaction of an increasing demand for action on climate change.⁵⁰

Where are these offset projects located? According to latest reports, an estimated 23% of the 2007 global market volume in offsets came from U.S. providers.⁵¹ The U.S. market has increased by 66% in the last three years to 10.2 million tons in 2007.⁵² In 2007, at least 211 projects produced offsets in the U.S., which represents an increase of 125% since 2004.⁵³ Ninety-three

the Parties flexibility in attaining their respective targets); Eric Schaffner, Comment, *Repudiation and Regret: Is the United States Sitting Out The Kyoto Protocol to Its Economic Detriment?*, 37 ENVTL. L. 441, 448 (2007) (discussing that emissions trading, the Clean Development Mechanism and Joint Implementation are mechanisms included within the Kyoto Protocol that are largely based on the efforts of the U.S. delegation in Kyoto and are designed to give Parties to the Protocol flexibility in meeting their emissions reduction goals).

⁴⁶ See generally GAO REPORT, *supra* note 15 (describing the European Union Emissions Trading Scheme); WORLD BANK REPORT, *supra* note 44, at 7 ("The EU Emission Trading Scheme . . . continued to dominate the global carbon market in 2007, both in transaction volume and monetary value.").

⁴⁷ FORGING A FRONTIER, *supra* note 3, at 9.

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.* at 5.

⁵¹ *Id.* at 43; see also GAO REPORT, *supra* note 15, at 13 (acknowledging that twenty-three percent of the volume of offsets sold in 2007 may have come from U.S. providers, but noting it is difficult to separate out the U.S. portion of the global market because U.S. market participants engage in private transactions across domestic and international boundaries).

⁵² GAO REPORT, *supra* note 15, at 13.

⁵³ *Id.* European voluntary buyers accounted twenty-eight percent of purchases in 2006. *Id.*

of those 211 projects were methane projects.⁵⁴

A. Offsets as Part of Coming Cap-and-Trade Regulation

Even given our current healthy skepticism of the almighty marketplace, market-watchers and policymakers anticipate some form of cap-and-trade system of GHG emissions coming online in the United States within the next few years.⁵⁵ If a domestic cap-and-trade system is adopted, the carbon offset market is projected to grow exponentially because regulated entities will likely be allowed to meet a significant portion of their targeted reductions through offsets.⁵⁶ Most legislative versions of cap-and-trade programs introduced in the last few years incorporate offsets as a part of emissions reduction goals.⁵⁷ For example, the Lieberman-Warner Climate Security Act of 2008 allowed up to 15% of emissions reductions to be met through investment in offsets, and a recent draft cap-and trade bill unveiled in the House of Representatives would allow offsets to account for 20% up to 70% of emissions reductions, depending on the total annual cap.⁵⁸

⁵⁴ *Id.* at 16.

⁵⁵ See FORGING A FRONTIER, *supra* note 3, at 21 (noting legislation addressing climate change is quickly evolving at the national and multi-state level as more states become involved and members of Congress announce new legislative proposals).

⁵⁶ *Id.* at 30.

⁵⁷ See *id.* at 26-30 (describing the quantity of offsets allowed under various legislative proposals in the 110th Congress).

⁵⁸ *Id.* at 26. See also S. 3036, 110th Cong. §§ 2402(a), 2501 (describing the domestic offset program and use of international emissions allowances). S.3036 was debated in the Senate in June 2008, but the bill was ultimately defeated when the sponsors failed to secure enough votes to limit debate and move the bill toward a final Senate vote. See 154 CONG. REC. S5333-05, S5333-34 (daily ed. June 6, 2008) (vote on cloture motion). At the close of the 110th Congress, the House Select Committee on Energy Independence and Global Warming issued a final staff report that included recommendations for the 111th Congress. See H.R. REP. NO. 110-915, at 11 (2008) (discussing recommendations). The first recommendation called for the enactment of economy-wide cap-and-trade legislation that would include, among other provisions, rigorous standards governing the award of offset credits, robust financial incentives for supplemental reductions in "uncapped" emissions, and the establishment of a rigorous framework for oversight of the carbon markets. *Id.* At the time this article is going to print, the White House has endorsed a draft climate and energy bill unveiled by the House Energy and Commerce Chairman Henry Waxman of California and Representative Ed Markey of Massachusetts. See the American Clean Energy and Security Act of 2009 (discussion draft), 11th Congress, March 31, 2009, available at http://energycommerce.house.gov/Press_111/20090331/acesa_discussiondraft.pdf. The

A great deal of energy is being expended by various groups exploring how offsets will fit into the new regulatory scheme and how to integrate offsets into the international market.⁵⁹ The uniformity and transparency afforded by a standardized certification program will help U.S. offsets gain access to international carbon markets that require certification.⁶⁰ Offsets

Waxman-Markey legislation would establish a cap-and-trade program allowing offsets to be used to meet from 20% to up to 70% of the green house gas reductions, depending on the total annual cap. *Id.* This flexibility appears to acknowledge that as the cap on emissions is lowered, covered sources may have to rely increasingly on offsets to meet reduction targets. See Victor Flatt, Center for Progressive Reform Blog, *Waxman-Markey: Carbon Offsets*, available at <http://www.progressiveregulation.org/CPRBlog.cfm?idBlog=64B9CE12-1E0B-E803-CAAC5B9AF14D5223> (April 2, 2009).

⁵⁹ See Memorandum from Victor B. Flatt on Environment, Energy & Natural Resources Center, Project to Examine Barriers and Solutions to Integrating E.U. and U.S. Carbon Markets, Particularly Issues Concerning Offset Definition (Nov. 2008) (on file with The Center for Environment, Energy & Natural Resources Law at the University of Houston Law Center), available at <http://www.law.uh.edu/EENRCenter/documents/trading-integration-paper.pdf> (noting whether offsets should be allowed both domestically and internationally is an important question that needs to be answered before enacting any cap-and-trade bill). See also, Erik B. Bluemel, *Unraveling the Global Warming Regime Complex: Competitive Entropy in the Regulation of the Global Public Good*, 15 U. PA. L. REV. 1981 (2007) (discussing the need for harmonizing the "global warming regime complex" to maximize compliance with international climate change measures); Margaret Chon, *Marks of Rectitude: Fair Trade, Brand-Based Regulation and New Global Governance*, 77 FORDHAM L. REV. (forthcoming in 2009) (exploring international standard-setting in the context of trademarks and certification marks and the potential for furthering the goals of consumer protection and access to market information).

⁶⁰ Under the Kyoto Protocol, there are two primary mechanisms designed to produce offsets or emissions credits. See FORGING A FRONTIER, *supra* note 3, at 20-21 (describing the Protocol's flexibility mechanisms). The Clean Development Mechanism (CDM) allows developed countries to accrue certified emission reduction (CER) credits by financing carbon reduction projects in developing countries. *Id.* at 21. Joint Implementation (JI) allows emitters in developed countries to purchase emission reduction units (ERUs) that can be used to meet Kyoto targets from GHG reduction projects implemented in either another developed country or a country with an economy in transition. *Id.* at 20. In both cases, the CER and ERU credits must undergo independent certification and verification. Kyoto Protocol, *supra* note 45. In fact, the European Union has formally advocated linking any future U.S. cap-and-trade market to the E.U. market by 2015, and has called for uniformity in offsets, specifically compliance with CDM offset protocol. See Press Release, European Press Room, European Union Sets Out Proposals for Global Pact on Climate Change (Jan. 28, 2009), available at http://www.eurunion.org/eu/index.php?option=com_content&task=view&id=3011&Item

originating in the United States will reach their potential both domestically and on the international markets when they are certified under a uniform standard, assuring buyers that the offsets are credible and fungible.⁶¹

B. The Anatomy of a Carbon Offset

Players in the OTC market include: (1) project developers; (2) aggregators, wholesalers and retailers of offsets; (3) brokers, websites and exchanges that facilitate transactions; (4) consumers, including individuals, businesses, non-profits, governments, research institutions, universities, religious congregations, utilities and others; and (5) third party certifiers.⁶²

Certifiers play a key role in this market as consumers frequently rely on them to verify the claimed attributes of the carbon offset.⁶³ Certifiers will play an increasingly integral role as we struggle to commoditize offsets to integrate them into domestic and international markets.

Currently, an array of at least ten offset protocol and certification programs offer various definitions of what constitutes a viable offset, each program employing its own certification standards, which range in degree of complexity.⁶⁴

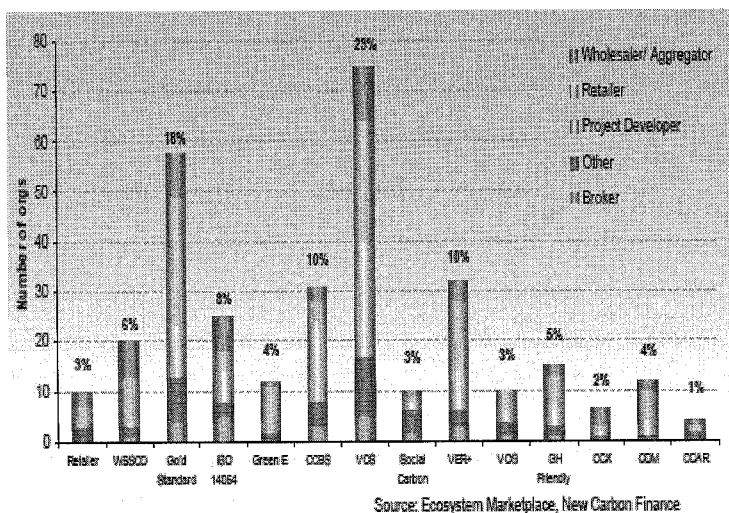
id=58.

⁶¹ GAO REPORT, *supra* note 15, at 28. See also Beth Daley, *Carbon Confusion: Buying Emission Offsets is a Challenge for Consumers*, BOSTON GLOBE, Mar. 13, 2007, at A1 (noting that lack of a uniform standard for what constitutes a legitimate offset makes it difficult for consumers to sort out effective offsets from projects that have little true environmental value). What will become of the voluntary carbon market in a GHG emissions regulated world, however, is a separate question from whether or not the voluntary offset market should be subject to a uniform standard. See ECOSYSTEM MARKETPLACE & BUSINESS FOR SOCIAL RESPONSIBILITY, OFFSETTING EMISSIONS: A BUSINESS BRIEF ON THE VOLUNTARY CARBON MARKET 2008 18 (2008) (noting a popular view is that demand for experimental projects and beyond-compliance actions will persist, so even as regulated schemes expand there will be a place for voluntary markets).

⁶² FORGING A FRONTIER, *supra* note 3, at 18-19.

⁶³ See GAO REPORT, *supra* note 15, at 24-25 (noting that one study estimated that more than 85% of the offsets purchased on the retail market in 2007 were verified by third parties). Some estimates of the actual percentages of verified offsets, however, fall below 50%. *Id.*

⁶⁴ See *id.* at 56-58 (describing selected carbon offset standards); FORGING A FRONTIER, *supra* note 3, at 58, tbl.4 (describing a number of standards in the voluntary carbon market), WWF REPORT, *supra* note 16.



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This proliferation of standards is causing confusion in the marketplace as there exists no cognizable uniform standard by which to measure the reliability of offset projects.⁶⁶ The lack of a consistent certification standard undermines the integrity of offsets, both in terms of the current voluntary offset market and future regulatory markets the United States may join.⁶⁷ Creating a uniform certification system will address consumer protection concerns, and, assuming the standard is reliable and effective, will also address concerns about the quality of offsets.⁶⁸

⁶⁵ FORGING A FRONTIER, *supra* note 3, at 57 tbl.2, *Future Standards that Suppliers Plan to Use in 2006*. Of the certification programs available, the Voluntary Carbon Standard (VCS) appears to garner the most interest. *Id.* The VCS was developed in 2005 by The Climate Group, the International Emissions Trading Association and the World Economic Forum to provide a robust global standard for voluntary GHG emission reduction and removal projects and their validation and verification. Voluntary Carb. Stand., VCS ASSOC. (2008) 2007.1 5, available at http://www.v-c-s.org/docs/Voluntary%20Carbon%20Standard%202007_1.pdf. The most recent revision of the standard, VCS 2007.1, is based primarily on the requirements established by the International Standards Organization (ISO). *Id.* See generally *id.* at 10-23, for a description of project level requirements and methodologies, as well as the validation and verification process and requirements.

⁶⁶ See GAO REPORT, *supra* note 15, at 8 (“Participants in the offset market face several challenges to ensuring the credibility of offsets, including . . . the existence of many quality assurance mechanisms for verification and monitoring.”).

⁶⁷ See, e.g., Kyoto Protocol, *supra* note 45.

⁶⁸ See Kyoto Protocol, *supra* note 45. (“The proliferation of standards has caused confusion in the market, and the existence of multiple quality assurance mechanisms

Many factors can go into the certification of offsets. There are certain qualifications that, at a minimum, should be met before verification.⁶⁹ To be legitimate, offsets must be:

(1) **Additional:** the offset must decrease GHG emissions below quantities that would have been emitted otherwise in a business as usual situation. In other words, your contribution made a difference;⁷⁰

(2) **Quantifiable:** the claimed reductions in GHG can be measured;

(3) **Real:** the claimed reductions can be verified;

(4) **Permanent:** the emissions reduced, sequestered or avoided by the offset project will not be released into the atmosphere in the future; and

with different requirements raises questions about the quality of offsets available on the voluntary market.”). The type and efficacy of the standard ultimately promulgated is a separate issue and beyond the scope of this article; for the purposes of this discussion, however, I will assume that the uniform standard adopted will be effective in supporting quality control.

⁶⁹ MELLON REPORT, *supra* note 30, at 7. In addition to the five factors enumerated here, some certification programs also include “co-benefits,” which quantify social and environmental benefits like better habitat preservation and reduction in non-GHG pollution. *See, e.g.,* The Gold Standard, Annexes to Toolkit 2.0 124-30, http://www.cdmgoldstandard.org/uploads/file/Gold%20Standard_v2_Toolkit_annexes_2_0080730.pdf (last visited Jan. 25, 2009) (requiring completion of a sustainable development matrix that evaluates a number of environmental and social factors, as well as development of a sustainability monitoring plan as part of application for certification of Gold Standard offsets).

⁷⁰ *See* MELLON REPORT, *supra* note 30, at 7 (describing the real, additional, permanent and verifiable qualities of reductions in emissions of greenhouse gases); GAO REPORT, *supra* note 15, at 59 (noting that over the past year buyers and sellers have become increasingly aware of the relevance and role of carbon credit registries that track credit transactions and ownership, as well as reduce the risk that a single credit can be sold to more than one buyer). It should be noted that there are a wide variety of methods for determining additionality, including investment analysis (considers the financial attractiveness of a proposed project without revenue from offsets), barrier analysis (considers the organizational, cultural, or social impediments to the implementation of a proposed project) and common practice analysis (if a project does not reduce emissions below levels produced by “common practice” technologies that provide the same products and services as the project, the project should not be pursued, regardless of the potential for offsets). *Id.* at 26, tbl.2. *See also* THE CLIMATE TRUST, DETERMINING THE ADDITIONALITY OF GREENHOUSE GAS REDUCTION PROJECTS 5-6 (2008), *available at* http://www.climatetrust.org/pdfs/Climate_Trust_Additionality.pdf (listing the tests to determine a project’s additionality as the regulatory surplus test, the barriers test, and the common practice test).

(5) **Enforceable:** offset must be backed by documents establishing exclusive ownership, ensuring no multiple ownership or double counting (multiple purchases of the same offset).⁷¹

C. Too Many Certifiers Spoil the Soup

Significant challenges face the carbon offset market. The lack of a uniform definition of “carbon offset” or an industry consensus around baseline minimum standards for verifying these offsets in the United States raises real problems in terms of consumer confusion and the potential for fraud.⁷² The term “certified” has different meanings concerning the reliability of particular offset project attributes, depending on which certification standard or protocol is being applied.⁷³ A consumer has no choice in which protocol is used and is likely unaware of the distinction between certification protocols, as it is unclear exactly what is being verified through “certification.” Are consumers of carbon offsets getting what they pay for? Are these offset projects actually reducing GHG emissions? Limited consumer protection is provided through existing fraud standards administered by state Attorney Generals, but there is no actual government oversight of this market.⁷⁴

The Federal Trade Commission (FTC) is currently examining the potential for fraud in the offset market. The FTC publishes the “Guides for use of Environmental Marketing Claims” commonly known as the “Green Guides.”⁷⁵ The Green Guides outline general principles for environmental marketing claims and provide

⁷¹ The creation of registries tracking ownership of offsets would address this attribute. Although beyond the scope of this discussion, others have made the case that registries must be part of any future offset market. See, e.g., GAO REPORT, *supra* note 15, at 9, 32 (recommending the establishment of a standardized registry for tracking the creation and ownership of offsets); MELLON REPORT, *supra* note 30, at 16 (“An effective system of registries is critical for an intangible good like carbon to ensure against double counting of emissions reductions and final retirement of credits.”).

⁷² VERMONT OFFICE OF ATTY. GEN., *supra* note 20; see also Harvey & Fidler, *supra* note 19.

⁷³ See, e.g., GAO REPORT, *supra* note 15, app. VII, 56–57.

⁷⁴ VERMONT OFFICE OF ATTY. GEN, *supra* note 20, at 1 (citing the consumer concerns of ten State Attorney Generals regarding varying definitions of a carbon offset and making recommendation, including that of enforcement improvements).

⁷⁵ FTC, REPORTER RESOURCES: THE FTC’S GREEN GUIDES, <http://www.ftc.gov/opa/reporter/greengds.shtm>, (last visited Feb. 1, 2009).

specific guidance for the use of certain terms in advertising and labeling, such as “recyclable,” “compostable,” and “biodegradable.”⁷⁶ In November 2007, the FTC began conducting a regulatory review of the Green Guides, and is now considering whether to amend the Guides to include carbon offsets and renewable energy credits.⁷⁷ Significantly, the provisions of the Guides are voluntary and are not enforceable; they are designed to help marketers avoid making unfair or deceptive claims that may run afoul of Section 5 of the FTC Act, 15 U.S.C. Section 45.⁷⁸

Initially conceived as a response to the proliferation of green marketing claims that began in the late 1980s and early 1990s, the Green Guides may seem like an appropriate venue for addressing consumer protection concerns surrounding carbon offsets, as one of the latest “go green” products to hit the market.⁷⁹ However, given the enforcement limitations of the Green Guides, FTC’s involvement will not supplant the need for a uniform certification standard. Moreover, the FTC’s mission with regard to environmental matters is limited to trade and consumer protection concerns; FTC’s review of the Green Guides does not address the complex environmental policy issues underlying specific offset performance standards.⁸⁰ Because carbon offsets cover a diverse range of potential projects, the success of which depends on a number of complex attributes that have not been uniformly defined, relying on the Green Guides to sort out consumer confusion and market integrity concerns seems premature at best and ineffective as the sole source of government oversight of this

⁷⁶ 16 C.F.R. § 260 (2008).

⁷⁷ See FTC Guides for the Use of Environmental Marketing Claims; Carbon Offsets and Renewable Energy Certificates; Public Workshop [hereinafter *FTC Guides*], 72 Fed. Reg. 66094; 66097 (Nov. 27, 2007) (codified at 16 C.F.R. § 260), available at <http://edocket.access.gpo.gov/2007/pdf/E7-23006.pdf>.

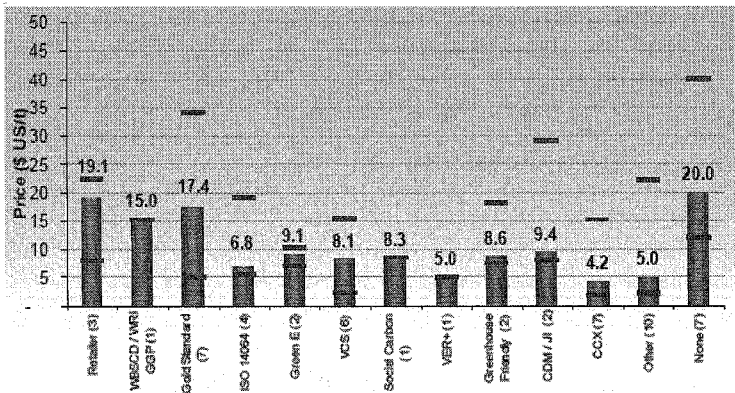
⁷⁸ 15 U.S.C. § 45 (2008). Specifically, the Guides “provide the basis for voluntary compliance with such laws by members of industry. Conduct inconsistent with the positions articulated in these guides may result in corrective action by the Commission under Section 5 if, after investigation, the Commission has reason to believe that the behavior falls within the scope of conduct declared unlawful by the statute.” 16 C.F.R. § 260.1 (2008).

⁷⁹ 16 C.F.R. § 260 (2008). FTC issued the Green Guides in 1992, and updated them in 1996 and 1998.

⁸⁰ See *FTC Guides*, *supra* note 77.

market. Thus, any action by the FTC would be supplemental, and would not obviate the need for government oversight in the context of a uniform certification standard of carbon offsets.

Lack of standardization in the U.S. offset market makes it difficult for consumers to determine if offsets are fungible (interchangeable and of comparable quality). The market reveals considerable price variance between offsets, ranging from \$4.2 per ton of carbon to \$20 per ton of carbon, raising concerns that offsets are not a uniform commodity that can be efficiently traded on domestic and international markets.⁸¹



Source: Ecosystem Marketplace, *New Carbon Finance*. Note: Number within parentheses indicates number of data points.

A uniform standard of certification would help provide price stability while addressing consumer confidence issues and shoring up the integrity of the offset market.

II. Lessons Learned from the Evolution of the Organic Products Market; From a Fragmented, Multi-Standard Approach to a Uniform Standard of Certification

The history underlying the organic agriculture certification model is instructive in the present case. The Organic Food Production Act of 1990 (OFPA) was promulgated to address the proliferation of organics claims in the 1970s through the 1980s which had created a confusing patchwork of conflicting state and private marketing standards.⁸² Oregon passed the first organic

⁸¹ See FORGING A FRONTIER, *supra* note 3.

⁸² See Donald Hornstein, *The Road Also Less Taken: Lessons from Organic Agriculture For Market- and Risk-Based Regulation*, 56 DUKE L.J. 1541, 1550 (2006).

food law in 1973, and by 1990, twenty-two States had passed some kind of organics regulation.⁸³ These regulations varied significantly in terms of the definition of “organic” – for example, a loaf of bread labeled “organic” might contain 20% organic ingredients, 100%, or zero organic ingredients.⁸⁴ Certification was required in some states, and not in others.⁸⁵ Moreover, twenty-eight states had no organics regulations at all.⁸⁶ Thus, consumers of organics were faced with a confusing array of “organic” products with no way to verify their authenticity.

Emboldened by the lack of uniform certification, false and misleading organics claims multiplied.⁸⁷ These conflicting and sometimes misleading claims undermined consumer confidence in organic products and, as a result, both consumers and retailers of organic products became reluctant to purchase those products.⁸⁸

It became inefficient and unmanageable to address consumer confusion and consumer fraud concerning organic products on a case-by-case basis. Faced with this consumer confusion, particularly in the climate of growing consumer interest in organics both domestically and abroad, the organics industry petitioned Congress to create a federal uniform standard.⁸⁹

⁸³ OR. REV. STAT. § 616.406 (1996) (originally codified at § 632.95 (1973), repealed 2002). See Kate L. Harrison, *Organic Plus: Regulating Beyond the Current Organic Standards*, 25 PACE ENVTL. L. REV. 211, 215 (2008); Kenneth C. Amatitz, *The Organic Foods Production Act of 1990 and Its Impending Regulations: A Big Zero for Organic Food?*, 52 FOOD & DRUG L.J. 537, 539 (1997); Kyle W. Lathrop, *Preempting Apples with Oranges: Federal Regulation of Organic Food Labeling*, 16 J. CORP. L. 885, 891 (1991).

⁸⁴ See Gordon G. Bones, *State and Federal Organic Food Certification Laws: Coming of Age?*, 68 N.D. L. REV. 405, 425 (1992); (citing S. Rep. No. 357, 101st Cong., 289, 290-92 (1990), reprinted in 1990 U.S.C.C.A.N. 4944).

⁸⁵ See Harrison, *supra* note 83, at 215; Bones, *supra* note 84, at 408; Amatitz, *supra* note 83, at 539.

⁸⁶ See Harrison, *supra* note 83, at 215; Bones, *supra* note 84, at 406; Amatitz, *supra* note 83, at 539.

⁸⁷ See Bones, *supra* note 84, at 406; Amatitz, *supra* note 83, at 539; see also Harrison, *supra* note 83, at 215.

⁸⁸ S. REP. NO. 357, reprinted in 1990 U.S.C.C.A.N. 4944; Amatitz, *supra* note 83, at 539.

⁸⁹ Amatitz, *supra* note 83, at 539; see also JEAN M. RAWSON, ORGANIC AGRICULTURE IN THE UNITED STATES, PROGRAM & POLICY ISSUES 3-4 (Cong. Res. Serv., updated Aug. 22, 2008) (“The industry maintained that federal standards would reduce consumer confusion over the many different state and private standards in use, and

OFPA became law in 1990.⁹⁰ The OFPA is essentially a marketing-oriented statute that sets uniform minimum standards for producers and processors of organic products.⁹¹ When a product is labeled “Certified Organic” in the United States today, it means that the product has successfully met a detailed series of regulations mandating how that product is grown, harvested, raised, and prepared.⁹² The OFPA thus provides a process-based definition of organic (e.g. examining whether pesticides are used in managing crop pests) rather than a product-based definition that would rely on quantified characteristics of the product itself, such as whether the product contains pesticides or other chemical residues.⁹³

would promote confidence in the integrity of organic products over the long term.”).

⁹⁰ 7 U.S.C. § 6501 (2004).

⁹¹ States may seek approval to establish their own State Organic Program and may adopt “more restrictive requirements because of environmental conditions or the necessity of specific production or handling practices particular to the State or the region of the United States.” 7 C.F.R. § 205.620 (2008). To date, California and Utah are the only states that have their own organics programs, although Utah recently announced plans to discontinue its program. See Dawn House, *State Eliminates Organic Certification Program*, SALT LAKE TRIB., Jan. 28, 2009. California’s program can be accessed at: http://www.cdfa.ca.gov/is/i_&c/organic.html.

⁹² 7 C.F.R. §§ 205.300 (2008), 205.400 (2008). The U.S.D.A. National Organic Program (NOP) recognizes the following labeling options: (a) “100 percent organic” – must contain (by weight or fluid volume, excluding water and salt) 100 percent organically produced ingredients (7 C.F.R. §205.301(a) (2008)); (b) “Organic” – must contain (by weight or fluid volume, excluding water and salt) not less than 95 percent organically produced raw or processed agricultural products (7 C.F.R. §205.301(b)); (c) “Made with organic” – Must contain (by weight or fluid volume, excluding water and salt) at least 70 percent organically produced ingredients (7 C.F.R. §205.301(c)); (d) “Products with less than 70 percent organically produced ingredients” – Contains less than 70 percent organically produced ingredients (7 C.F.R. §205.301(d)); (e) Packaged products labeled “100 percent organic” or “organic” on the information panel, must identify the name of the certifying agent that certified the handler of the finished product and may display the business address, Internet address, or telephone number of the certifying agent in such label (7 C.F.R. §205.303(a)); (f) Packaged products labeled “100 percent organic” or “organic” must also identify each organic ingredient in the ingredient statement with the word “organic” or with an asterisk or other reference mark which is defined below the ingredient statement to indicate the ingredient is organically produced (7 C.F.R. §205.303(b)). In all cases, water or salt included as ingredients cannot be identified as organic. *Id.*

⁹³ See *id.*; see also Michelle T. Freidland, *You Call that Organic? The USDA’s Misleading Food Regulations*, 13 N.Y.U. ENVTL. L.J. 379, 384 (2005) (critiquing the NOP as being a “process” based, rather than “product” based organic certification

The stated purpose of the OFPA is to “(1) establish national standards governing the marketing of certain agricultural products as organically produced products; (2) assure consumers that organically produced products meet a consistent standard; and (3) facilitate interstate commerce in fresh and processed food that is organically produced.”⁹⁴ Thus, the statute was specifically designed to address consumer confusion over the myriad state and private organics standards in use and to promote confidence in the integrity of the organic products market in the long term.⁹⁵ Market stakeholders recognized that creating a consistent U.S. organic standard would facilitate access to international organic markets.⁹⁶

system).

⁹⁴ 7 U.S.C. § 6501 (2004), “Purposes.”

⁹⁵ RAWSON, *supra* note 89, at Summary. (“The purpose of the program, which was implemented in October 2002, is to give consumers confidence in the legitimacy of products sold as organic, permit legal action against those who use the term fraudulently, increase the supply and variety of available organic products, and facilitate international trade in organic products.”). Consumer confidence in the integrity of organic products was recently shaken when it was discovered that the Organic Crop Improvement Association certified as organic peanuts that were contaminated with salmonella. As a result of this contamination, nine people have died and hundreds of people have become ill. Kim Severson & Andre Martin, *It's Organic, but Does that Mean it's Safer?* N.Y. TIMES, Mar. 4, 2009, D1. This horrific situation reveals the limitations of organic certification, which ironically certifies that a particular food product was produced without the aid of pesticides, but not that the food is safe to consume. *Id.* As discussed further in Part IV, the peanut case also underscores the potential conflict of interest in the third party certification structure, and the need for meaningful government oversight of any such third party certification program.

⁹⁶ RAWSON, *supra* note 89, at 4 (“Industry analysts asserted that a consistent U.S. organic standard would facilitate access to a potentially lucrative international organic market.”). In fact, both domestic and international organic markets have been quite lucrative. *Id.* at 1 (“The annual rate of market growth for organic foods and other products has remained around the 20% rate it achieved beginning in 1990, although analysts generally expect it to moderate over the next decade.”). *Id.* (citing U.S. DEP'T OF AGRICULTURE, ECONOMIC RES. SERV., REPORT NO. AIB777, RECENT GROWTH PATTERNS IN THE U.S. ORGANIC FOODS MARKET (Sept. 2002)). According to the Organic Trade Association 2007 Manufacturer's Survey, domestic sales of organic food products were \$16.7 million in 2006 (about 2.8% of total U.S. retail food sales). *Id.* Limited figures are available for US export of organic foods, but were estimated between \$125–300 million in 2000–2002. *Id.* at 2. Interestingly, the fastest growing area appears to be sales of nonfood organic products (supplements, personal care products, flowers, pet foods and fibers), which accounted for \$938 million in sales in 2006. RAWSON, *supra* note 89, at 2.

The history of consumer confusion over the unregulated organics market and the need for a uniform standard defining organic products shares striking similarities with the current state of the carbon offset market.⁹⁷ Consumers cannot independently verify whether a particular product is organic. Nor can consumers independently verify whether a carbon offset lives up to its GHG reduction promise. While we can decide if Coke really does taste better than Pepsi, we can't independently verify whether or not a breakfast cereal is organic or if a methane burning project at a landfill in Texas is additional and quantifiable. Consumers rely on certification to vouch for the claimed attributes of these products.⁹⁸

As discussed herein, the same problems of consumer confusion and questions of product integrity that undermined the organics market now plague the offset market.⁹⁹ Narrowing the

⁹⁷ The concerns expressed in the Senate report underlying OFPA track similar problems facing the carbon offset market today: "Growth in the organic food trade however has been hampered by a lack of consistent standards for production. The Committee believes that it is time for national standards for organic production so that farmers know the rules, so that consumers are sure to get what they pay for, and so that national and international trade in organic foods may prosper." S. REP. NO. 357, *reprinted in* 1990 U.S.C.C.A.N., at 4943.

⁹⁸ "[T]he essence of [certification] is that consumers can believe it, because it is not an unsubstantiated boast by the company itself but the result of an examination, against internationally accepted standards of best practice, by trained and experienced auditors who don't hesitate to say no or to impose conditions." JARED DIAMOND, *COLLAPSE: HOW SOCIETIES CHOOSE TO FAIL OR SUCCEED*, 474 (Penguin Books 2006) (as quoted by Dodge, *supra* note 14).

⁹⁹ See Michael Gillenwater, Derik Broekhoff, Mark Trexler, Jasmine Hyman, & Rob Fowler, *Policing the Voluntary Carbon Market*, 6 NATURE REP., CLIMATE CHANGE 85, 86 (2007) (describing the challenges facing GHG offsets as including "monitoring and verification to assure that offsets are being achieved in the manner and quantity promised." Gillenwater goes on to state:

Generally, independent third-party verification of offset projects against a common standard is necessary for consumers to have a reliable and unbiased source of information on offset quality. Analogously, we do not expect consumers of organic food to monitor the farming practices of their food suppliers. Yet, for voluntary carbon offsets, there is no agreed standard for monitoring methods or the appropriate frequency and requirements for verification.

Id. See also GAO REPORT, *supra* note 15. Arguably, the need for reliable, uniform standards is even more acute in the context of carbon offsets than in the Organics market. In the offset market, one is certifying the *absence* of something – GHG emissions, rather than the attributes of a product in hand. The consumer has no organic apple to examine or cup of hot "fair trade" coffee to taste at the end of an offset

field from ten diverse certification protocols to one uniform standard verifying a set group of offset project attributes would be one way to address these issues.¹⁰⁰ Moreover, as in the organics market, the creation of a single, uniform standard is likely to be a necessary step to integrating the U.S. offset market into any future U.S. cap-and-trade regime.¹⁰¹ Finally, a uniform standard may also prove to be essential to facilitating access of U.S. offset to international markets.¹⁰²

III. The Role of Market Stakeholders in Creating and Administering a Uniform Certification Standard for Carbon Offsets

Working from the proposition that a single certification standard is desirable, the issue becomes how to develop that standard and how to administer it. Potential regulatory approaches range from interventionist command and control approaches with predictable standards and policed enforcement, to economic incentives and co-regulation, to self-regulation and pure voluntarism.¹⁰³ A variety of factors influence which regulatory

transaction. Rather, the consumer pays for the promise that a number of tons of GHG emissions will be eliminated or avoided based on the claimed attributes of a particular offset project.

¹⁰⁰ *Id.*

¹⁰¹ See, e.g., S. 2191, 110th Cong. §§ 2402, 2502; see also H.R. REP. NO. 110-915, at 45-56 (2008) (recommending that the 111th Congress enact cap-and-trade legislation that includes the use of offsets).

¹⁰² As discussed in Part I, the United States is a significant exporter of offsets. The majority of consumers of U.S. offsets are foreign entities that purchase U.S. offsets despite the fact that those offsets do not satisfy GHG reduction requirements under Kyoto. See *supra* notes 44, 45. Sales of U.S. offsets are likely to increase if they meet reduction requirements under international law.

¹⁰³ There exists a vast body of literature discussing the merits and foils of co-regulation. See, e.g., Kimberly Krawiec, *The Return of the Rogue*, 50 ARIZ. L. REV. 879 (forthcoming 2009) (“[T]he literature on responsive regulation and its many variations is vast, nuanced, and spans numerous fields, including law, management and environmental sciences, political science, and sociology.”). See also IAN AYRES & JOHN BRAITHWAITE, *RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE* (Oxford Univ. Press 1992) (drawing on empirical studies of regulation from other countries and game theory to advocate “responsive regulation”); Cary Conglianese & Jennifer Nash, *The Promise & Performance of Management-Based Strategies*, in *LEVERAGING THE PRIVATE SECTOR: MANAGEMENT-BASED STRATEGIES FOR IMPROVING PRIVATE SECTOR ENVIRONMENTAL PERFORMANCE* 261 (2006) (encouraging co-regulation through management-based strategies). However, this article only briefly touches on an

approach will be most efficient in a given industry sector. Those factors include the type of industry regulated, the size of enterprises within an industry, and what motivates that industry. Even the presence of particularly influential actors – such as a Bill Gates-type CEO – within a particular enterprise can make a difference.¹⁰⁴ The make-up of the regulated community can drive the effectiveness – or failure – of a particular form of regulation.¹⁰⁵ In general, providers of offsets in the U.S. offset market are smaller enterprises, motivated (at least in part) by environmental concerns.¹⁰⁶

A. The Role of Market Participants in Creating a Uniform Certification Standard

As described herein, certification of carbon offset projects in the voluntary market is private and voluntary. At the other end of the spectrum, the traditional command and control regulatory approach creates a very limited role for market participants in promulgating rules and standards. Under this model the government agency develops and implements standards and procedures, with limited input from the public. For example, under the CAA, the Environmental Protection Agency (EPA) is charged with creating the National Ambient Air Quality Standards (NAAQS) to determine which pollutants “cause or contribute to air pollution which may reasonably be anticipated to endanger

area ripe for future discussion in the context of climate change mitigation strategies.

¹⁰⁴ See NEIL GUNNINGHAM & DARREN SINCLAIR, *LEADERS & LAGGARDS: NEXT GENERATION ENVIRONMENTAL REGULATION* 199 (Greenleaf 2002) (noting that “the complexity of motivational forces influencing environmental behavior” creates a need to develop corresponding “instruments and strategies” for regulation). See also Krawiec, *supra* note 103, at 894 (noting that the effectiveness of co-regulation “is context-dependent and determined by any number of factors, including . . . the characteristics of individual regulated firms, such as senior management’s commitment to improvement”).

¹⁰⁵ GUNNINGHAM & SINCLAIR, *supra* note 104.

¹⁰⁶ See GAO REPORT, *supra* note 15, at 10. For examples of environmental organizations involved in developing offsets and standards for the voluntary markets, see, e.g., The Environmental Resources Trust, Inc., http://www.ert.net/aboutert_full.html #1 (developed by Environmental Defense Fund, providing registry and certification services), and The Gold Standard, <http://www.cdmgoldstandard.org> (providing standards and certification service for carbon offsets, created by environmental and development non-governmental organizations, including the World Wide Fund for Nature and the Rainforest Alliance).

public health or welfare[.]”¹⁰⁷ EPA is solely responsible for developing these air quality standards.¹⁰⁸ Participation by stakeholders or any other entity is limited to the public participation afforded by the notice and comment period.¹⁰⁹ Given the unique nature of the carbon offset market, strict adherence to a traditional command and control approach with limited opportunities for stakeholder input in the creation of a uniform certification standard for offset projects is not ideal.

Another path to standard certification might be industry agreement on one particular offset standard or protocol. The fair trade movement offers an example of a voluntary coalition around a uniform certification standard. Started on a very small scale by religious and political organizations seeking to promote improved labor conditions for growers and producers, the fair trade movement grew to over a billion dollar industry by 2005.¹¹⁰ A myriad of fair trade labeling initiatives had emerged across North America and Europe by the end of the 1990s.¹¹¹ Faced with consumer confusion over the proliferation of “fair trade” claims, the Fairtrade Labeling Organizations International (FLO) promoted the development of a single international fair trade label

¹⁰⁷ 42 U.S.C. § 7408 (2006).

¹⁰⁸ *Id.* (“[T]he [EPA’s] Administrator shall . . . publish, and from time to time thereafter revise, a list which includes each air pollutant”); see also Daniel H. Cole & Peter Z. Grossman, *When is Command-and-Control Efficient? Institutions, Technology, and the Comparative Efficiency of Alternative Regulatory Regimes for Environmental Protection*, 1999 WIS. L. REV. 887, 910 (1999) (discussing the origins of the Clean Air Act, and Congress’ broad delegation to the EPA).

¹⁰⁹ See 42 U.S.C. § 7607 (2006) (outlining rulemaking procedures for the “promulgation or revision of any national ambient air quality standard,” and limiting such procedures to notice and comment, and publication).

¹¹⁰ While the concept of “fair trade” can be traced back to the nineteenth century, the modern movement largely developed in the last sixty years. Andy Redfern A. & Paul Snedker, *Creating Market Opportunities for Small Enterprises: Experiences of the Fair Trade Movement*, International Labour Office (2002), <http://www.ilo.org/dyn/empent/docs/F1057768373/WP30-2002.pdf>. For a brief history of the fair trade movement, see the International Fair Trade Association, *Sixty Years of Fair Trade*, at http://www.wfto.org/index.php?option=com_content&task=view&id=10&Itemid=17 (last visited Mar. 27, 2009); see also Michael K. Goodman, *Reading Fair Trade: Political Ecological Imaginary and the Moral Economy of Fair Trade Foods*, 23 POL. GEO. 891 (2004).

¹¹¹ See Fairtrade Labeling Organizations International, http://www.fairtrade.net/about_us.html (last visited Mar. 27, 2009).

(the “Fairtrade Certification Mark”).¹¹² FLO is an umbrella organization that unites twenty labeling initiatives in twenty-one countries and producer networks around the globe. In order to use the fair trade mark on a product, entities in the production chain must meet the standards created and enforced by FLO, which is now the leading standard setting and certification organization for Fair trade labeled products.¹¹³ Certification of fair trade products is provided by Transfair USA, a member of FLO, and the only third-party certifier of fair trade products recognized by FLO in the United States.¹¹⁴

While the Voluntary Carbon Standard (VCS) is currently the most frequently utilized certification standard in the voluntary offset market, market stakeholders have not yet reached consensus on a particular standard or protocol as is the case in fair trade.¹¹⁵ Moreover, although FLO has been fairly successful in promoting the fair trade label, the FLO standard is not the only possible standard available and concerns remain about the possible dilution of that label by fair trade competitors.¹¹⁶ However, FLO remains an example of how a standardized certification scheme could develop in the context of carbon offsets.

A third standard-setting option is a regulatory scheme that incorporates the experience and expertise of market participants in creating a certification standard. The organic products industry provides an example of this type of blended regulatory system. In the Organic Food Product Act, the legislature mandated that the U.S. Department of Agriculture (USDA, the regulatory agency responsible for implementing the Act) include direct input from the organic foods industry through the creation of a National

¹¹² See *id.*

¹¹³ FLO requires compliance with Generic and Product Specific Fairtrade standards, as well as separate fair trade standards for traders. See Fairtrade Labeling Organizations International Standards, <http://www.fairtrade.net/standards.html>.

¹¹⁴ See *id.* See also Fair Trade Certified: Transfair USA, <http://www.transfairusa.org/> (last visited Mar. 27, 2009).

¹¹⁵ See FORGING A FRONTIER, *supra* note 3, for a discussion of Voluntary Carbon Markets.

¹¹⁶ See Todd Mumford, *Voluntary International Standards; Incorporating “Fair Trade” Within Multilateral Trade Agreements*, 14 S.W. J.L. & TRADE AM. 171, 172 (2007) (looking to Organic Food Labeling as a model for fair trade and raising concerns about the potential for copy cat fair trade labels).

Organic Standards Board (NOSB). The purpose of this fifteen-member board, comprised of nongovernment, industry representatives, was to “assist in the development of standards for substances to be used in organic production” and to “provide recommendations to the [USDA] Secretary regarding implementation.”¹¹⁷ The Act specifies that the fifteen-member board include a cross section of individuals with experience in organic farming, handling, sales, and certification, as well as individuals with expertise in environmental protection, toxicology, and consumer protection.¹¹⁸ While the interplay between the NOSB and the USDA proved somewhat flawed in practice – the final organic production standards were not promulgated until 2002, ten years after the Act was passed¹¹⁹ – the concept of an advisory board consisting of diverse market participants, whose role is to assist the regulatory government agency in developing a uniform certification standard, could prove particularly useful in the carbon offset context.

Shifting to a single uniform standard governing carbon offset projects will undoubtedly involve tradeoffs. According to a recent GAO Report on the offset market, some market participants have expressed concern that a single certification standard might reduce flexibility, increase administrative costs and could stifle

¹¹⁷ 7 U.S.C. § 9718(a) (2006); 7 U.S.C. § 9718(k) (2006).

¹¹⁸ Specifically, the Act provides as follows:

(b) Composition of Board. The Board shall be composed of 15 members, of which: (1) four shall be individuals who own or operate an organic farming operation; (2) two shall be individuals who own or operate an organic handling operation; (3) one shall be an individual who owns or operates a retail establishment with significant trade in organics products; (4) three shall be individuals with expertise in areas of environmental protection and resource conservation; (5) three shall be individuals who represent public interest or consumer groups; (6) one shall be an individual with expertise in the fields of toxicology, ecology or biochemistry; and (7) one shall be an individual who is a certifying agent [as defined in the Act].

7 U.S.C. § 9718 (b) (2006).

¹¹⁹ The final standards were the end result of years of negotiations between the USDA and the fifteen-member Board. After several missteps – the most notorious being the USDA’s 1997 inclusion of genetically modified organisms, nuclear irradiation and municipally treated sewage sludge in the “organics” process – over the strenuous objections of the NOSB Board – the USDA issued the final version of the NOP regulations in 2002. See Hornstein, *supra* note 82, at 1550.

innovation in the voluntary offset market.¹²⁰ On the other hand, a completely unsupervised drive for innovation may also encourage offset projects with unforeseen and undesirable environmental effects.¹²¹ The creation of an advisory board, like the NOSB, could help to address these concerns by bringing the existing expertise of project developers, certifiers and other market stakeholders to the regulatory process. Careful crafting of standards with direct input from market stakeholders could address issues such as encouraging innovation and incentivizing non-covered sectors. As market stakeholders, the advisory board members would have a direct understanding of potential trade-offs and a vested interest in creating workable standards. Moreover, environmental justice concerns, issues regarding leakage (reductions in one location causing emissions in another place for example, through relocation), and the role of collateral environmental benefits and harms could also be considered by such a board.¹²²

One might question why this proposed advisory board, made up of diverse stakeholders, should come to agreement on a uniform standard when they have not already done so. Certainly the existence of ten-plus certification standards and protocols evidences the fact that the market stakeholders have not yet succeeded in reaching a voluntary agreement on a single standard. However, a legislative mandate *requiring* a single standard and providing an opportunity for market participants to help design that standard may provide an incentive structure that is lacking in the current voluntary market.

¹²⁰ See GAO REPORT, *supra* note 15, at 28 (discussing the concern that a single standard will not provide the flexibility needed to deal with diverse and innovative projects).

¹²¹ See, e.g., RAMSEUR, *supra* note 16. For example, ocean fertilization, which purports to improve carbon sequestration by releasing iron into parts of the ocean to stimulate phytoplankton growth, is highly controversial. *Id.* (citing Ken O. Buesseler, et al., *Ocean Iron Fertilization – Moving Forward in a Sea of Uncertainty*, 319 SCI. MAG. 162, 162 (2008)).

¹²² See GAO REPORT, *supra* note 15, at 31, regarding administrative burdens.

B. The Role of Market Stakeholders in Administering a Uniform Certification Standard

Under a command and control regulatory approach, the government agency responsible for developing rules and standards is also typically responsible for implementing those standards.¹²³ While the governing federal agency may delegate authority to corresponding state agencies,¹²⁴ the public's role in administering standards is limited to self-reporting requirements.¹²⁵

A more inclusive approach is found in the fair trade and organics markets, which utilize independent, third party certifiers to certify products. In the case of fair trade, Transfair is the sole certifier of fair trade products in the United States, while FLO Cert GmbH, an independent international certification entity, offers fair trade certification in more than seventy countries.¹²⁶ Designating third party certifiers such as Transfair and FLO Cert gives FLO a measure of control and oversight in the certification process.

Similarly, in the organics market, the legislature expressly delegated the administration of certification standards to third party USDA-accredited certifiers rather funneling the entire process through the USDA.¹²⁷ Under the OFPA, the USDA accredits state and private certification agents who are charged with making site visits to producers, processors, and handlers to certify that their operations meet the OFPA's standards.¹²⁸ Certification applicants must have "sufficient expertise in organic

¹²³ See *supra* notes 85–86 and accompanying text.

¹²⁴ See 42 U.S.C. § 7410 (2006) (mandating that each state develop plans to implement and enforce the EPA's promulgation of NAAQS). The EPA must approve each state plan. *Id.*

¹²⁵ See ENVTL. PROT. AGENCY, CAA NATIONAL ENFORCEMENT PROGRAMS, <http://www.epa.gov/compliance/civil/caa/caaenfprog.html#stationary> (last visited Mar. 27, 2009) ("The Act grants EPA expansive and sweeping authority to: request information from individuals and companies, inspect facilities, conduct investigations, and pursue judicial and administrative enforcement actions for injunctive relief and civil penalties.").

¹²⁶ See FLO-CERT, <http://www.flo-cert.net/flo-cert/main.php> (last visited Mar. 27, 2009); Fair Trade Certification Overview, <http://www.transfairusa.org/content/certification/overview.php> (last visited Feb. 7, 2009); see also Mumford, *supra* note 116.

¹²⁷ 7 U.S.C. § 6503(d) (2006); see Hornstein, *supra* note 82, at 1550.

¹²⁸ 7 U.S.C. § 6503(d) (2006).

farming and handling techniques as determined by the Secretary.”¹²⁹ These state and private certifiers conduct annual reviews to verify continued compliance with the OFPA. Certification agents are reviewed for re-accreditation every five years.¹³⁰

Involving private enterprise by utilizing accredited third party certifiers to administer the uniform regulation and certify offset projects could serve several key functions if done with appropriate safeguards. First, there are likely to be fewer administrative costs involved in accrediting certifiers than in administering certification programs internally through a government agency. Moreover, using private certifiers rather than an administrative agency to conduct site visits and review and certify offset projects would likely be more time efficient. Administrative backlog would be death to many offset projects, which rely on timely certification in order to attract funding sources.¹³¹ Having several possible certifiers available should create competition and place a premium on timeliness and efficiency. In addition, using local third party certifiers with project-type expertise could help provide flexibility in dealing with projects unique to a specific geographical location. Dealing with a local certifier could provide project developers with access to someone familiar with particular local issues, as opposed to appealing to a large federal bureaucracy in Washington D.C.¹³²

¹²⁹ 7 U.S.C. §§ 6514–6516 (2006).

¹³⁰ 7 U.S.C. § 6514(c) (2006).

¹³¹ The cost of certification under a uniform standard might place additional financial burdens on offset providers. This burden is addressed in the organics market to some extent by the Organics Cost Share Program, a certification fund available for organic producers and handlers seeking certification. 40 C.F.R. § 205.400(e) (2008) (payment of fee to certifying agent required at application); *but see* 40 C.F.R. § 205.642 (2008) (fees charged by a certifying agent must be reasonable, and can charge applicants only those fees and charges that it has filed with the NOP). The 2008 Farm Bill reauthorizes the National Organic Certification Cost Share program and provides \$22 million to support it. *See* National Organic Certification Cost-Share Program, 7 U.S.C.A. § 6523 (2008). An organic producer or handler can receive up to 75% (\$750 maximum) of certification fees. *Id.* Creating a similar certification pool of money for offset certification would help alleviate some of the financial burdens associated with certification, and would be an improvement over the current system which requires payment of all certification costs by the party seeking certification.

¹³² Of course, to some extent, this would perpetuate the tension between uniformity and the need for flexibility in a market advancing new technologies.

Finally, certifiers may be in a stronger position than individual project developers to advocate project specific approaches that require more flexibility than a centralized administration of certification might allow.¹³³ Thus, third-party certifiers could act as “aggregators” of offset projects, advocating on behalf of a group of offset project developers to the appropriate government agency.¹³⁴

IV. Avoiding Potential Pitfalls Through Meaningful Government Oversight

This article does not purport to offer a blue print for the development and implementation of a particular uniform carbon offset certification program. A myriad of policy and practical considerations, too numerous to catalogue and address here, will govern that process. However, the dangers attending lack of meaningful government oversight in co-regulatory programs merit some discussion here.

Meaningful government oversight of private actor partners is crucial to the success of the blended regulatory carbon offset certification program proposed herein. Private actors participating in the regulatory process must be held accountable to the governing agency. The case for effective government oversight has been made most recently – and forcefully – by the Securities and Exchange Commission’s (SEC) stunning failure to oversee the credit rating agencies that helped shape our current financial crisis. The “big three” credit rating firms, Moody’s, Fitch, and Standard & Poor’s, have operated for decades with the SEC’s blessing as

¹³³ Stringent oversight of third party certifiers will be essential to ensure that this flexibility does not undermine offset validity or create an incentive for industry capture of local third party certifiers.

¹³⁴ For example, the National Farmer’s Union acts as an aggregator of carbon offset credits in its Carbon Credit Program (CCP), which sells offset credits generated on a large number of small farm projects on the CCX. The offset credits can be generated using a large number of techniques, including no-till crop production, methane capture, conversion of cropland to grass, sustainable management of native rangelands, and tree plantings on previously non-forested or degraded land. See National Farmer’s Union, Carbon Credit Program, <http://nfu.org/issues/environment/carbon-credits> (last visited Mar. 27, 2009); Chicago Climate Exchange, Inc., Members of CCX, <http://www.chicagoclimateexchange.com/content.jsf?id=64> (last visited Mar. 27, 2009) (listing members, including aggregators). See also GAO REPORT, *supra* note 15, at 3-4 (describing the role of aggregators in the carbon offset supply chain).

private, third party credit raters of their client's financial products.¹³⁵ Other than being officially recognized as "Nationally Recognized Statistical Rating Organizations" (NRSROs), the SEC provided no meaningful oversight of these powerful rating organizations. It was not until 2006 that the SEC promulgated regulations actually defining the requirements for certifying a credit rater.¹³⁶ Until that point the SEC had no authority to inspect or punish existing NRSROs.¹³⁷

What distinguishes the third party credit raters from the proposed third party certifiers described herein is the *absence* of a *uniform standard* in the rating industry. Each NRSRO employs their own distinct brand of credit rating – which has never been revealed to the public – and is not subject to regulation by the SEC.¹³⁸ The newest rules proposed by the SEC do not even require each certifier to reveal their credit rating system, much less require that each independent certifier use the same, uniform standard.¹³⁹ Thus, the promulgation of a uniform certification in and of itself will help alleviate some of the more egregious

¹³⁵ But see Peter Galuszka, *SEC Slaps Hands of Moody's, S&P, & Fitch, but Sidesteps Real Change*, BNET Fin. Serv., Dec. 4, 2008, <http://industry.bnet.com/financial-services/1000218/avoiding-serious-changes-the-sec-slaps-credit-raters-hands/> (discussing possible changes to the SEC's regulations, but acknowledging that any changes are weak).

¹³⁶ See SEC Nationally Recognized Statistical Rating Organizations, 17 C.F.R. §§ 240.17g-1-6 (2006) (detailing requirements for NRSROs such as reporting instructions and prohibited activities). The big three credit rating firms were "grandfathered in" as NRSROs in 1975. See Lawrence J. White, *The Credit Rating Industry: An Industrial Organization Analysis* 11 (N.Y.U. Ctr. for L. & Bus., Working Research Paper No. 01-001, 2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=267083. The big three were "grandfathered in" as NRSROs in 1975. *Id.*

¹³⁷ See Stephen Labaton, *Debt-Rating Agencies are Under Scrutiny* by S.E.C., N.Y. TIMES, Sept. 27, 2007, at C4 ("Congress adopted a law . . . that gave the S.E.C. new authority to inspect and punish the agencies."). The "new law" here refers to the Credit Agency Reform Act of 2006, 15 U.S.C.A. § 780-7 (2006), which is the basis for the SEC's rules pertaining to NRSROs.

¹³⁸ See Reem Heakal, *What is a Corporate Credit Rating?*, <http://www.investopedia.com/articles/03/102203.asp> (last visited Jan. 14, 2009) (noting that each firm applies different rating systems); Labaton, *supra* note 137 (reporting that Credit Agency Reform Act of 2006 prevents the SEC "from regulating the procedures and methods the agencies use to determine ratings").

¹³⁹ Labaton, *supra* note 137.

opportunities for consumer fraud and double-dealing in the offset market.

Even when certifiers are required to utilize a uniform standard in evaluating a particular process or product, problems arise when the government agency administering the third-party accreditation program lacks the funding necessary to provide meaningful oversight to third party certifiers. In other words, limited funding leads to limited oversight of certifiers. The National Organic Program has suffered from insufficient funding for the administration of its certification program. The recent outbreak of salmonella from peanuts that were certified as organic under NOP standards both reveals the limitations of the NOP program (which makes no claim as to the safety of certified organic food), and also provides a stark example of the dangers of lack of proper oversight of third party certification. While the third party certifiers found the peanuts in question to have met the organic production standards under the NOP, they apparently ignored evidence of health violations, such as rodent droppings and pest infestations, at the plant.¹⁴⁰ The resulting salmonella outbreak was responsible for the death of nine people, the illness of almost 700 people and the recall of nearly 3000 products.¹⁴¹ The tainted peanuts came from the Georgia and Texas plants owned by the Peanut Corporation of America.¹⁴² The Georgia plant was inspected by a private certifier, the Organic Crop Improvement Association, while the Texas plant was inspected for organic certification by the Texas Department of Agriculture.¹⁴³ Shockingly, the Texas Department of Agriculture certified as organic peanuts from the Texas plant even though that plant had no current state health department license.¹⁴⁴ As a result of these oversights, the USDA has issued a notice to all third party certifiers, stating "[e]ffective immediately, certifying agents are obliged to report violations of

¹⁴⁰ See Severson & Martin, *supra* note 94.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.*

¹⁴⁴ *Id.* (The state inspector was later terminated and the organic certification of the peanut company revoked).

health or safety to the appropriate local, State, or Federal officials.”¹⁴⁵

Aside from the inherent limits of (NOP), the actions of these certifiers fell rather short of public expectations. It is unclear whether the certifiers – both the private company and the Texas state agency – are under investigation by the USDA or whether their accreditation under the NOP is vulnerable. To date, the Compliance and Enforcement Section of the NOP has suspended the accreditation of two certifying agents, the American Food Safety Institute International and the California Crop Improvement Association.¹⁴⁶ Twenty other certifiers are listed by the NOP as “inactive” and revocation proceedings may be pending for these organizations.¹⁴⁷ This policing problem may be ameliorated by the increased financial support for NOP administrative costs allocated in the 2008 Farm Bill, which raises the annual authorization level for the NOP from \$2 million to \$6.5 million in 2009, and to \$11 million in 2012.¹⁴⁸ Similarly, adequate funding for agency administration and oversight of an offset certification program will be integral to the success of that program.

A related risk in third party certification programs arises from the inherent conflict of interest presented by the typical fee

¹⁴⁵ Letter from Barbara C. Robinson, Acting Director NOP to All USDA Certifying Agents, Re: Reporting Health and Safety Violations (Feb. 25, 2009) (on file with the author).

¹⁴⁶ Agricultural Marketing Service, National Organics Program, <http://www.ams.usda.gov/nop/> (follow “Certifiers” hyperlink on right-hand table, then “Compliance and Enforcement,” then “Suspensions and Revocations”) (last visited Mar. 27, 2009) [hereinafter NOP website]. Of course, the NOP’s failure to adequately police its accredited third party certifiers may arise as much from a lack of will as a lack of funding. Critics of the NOP question the choice of the USDA to oversee the standards for organic farming because the agency is a facilitator of – some claim captive of – conventional agriculture. See, e.g., Dion Casey, *Agency Capture: The USDA’s Struggle to Pass Food Safety Regulations*, 7 KAN. J.L. & PUB. POL’Y 142, 142 (1998). See also Thomas W. Merrill, *Capture Theory and the Courts: 1967-1983*, 72 CHI.-KENT. L. REV. 1039 (1997) (discussing agency capture), and Nicholas Bagley & Richard L. Revesz, *Centralized Oversight of the Regulatory State*, 106 COLUM. L. REV. 1260, 1282-1304 (2006) (describing various theories of bureaucratic behavior).

¹⁴⁷ NOP website, *supra* note 146 (follow “NOP Reading Room” hyperlink, then select “Accreditation Audit Reports” topic from the pull-down tab, then select “inactive” link at the bottom of the page) (last visited Feb. 10, 2009).

¹⁴⁸ RAWSON, *supra* note 89, at 9.

structure of third party certification programs.¹⁴⁹ Specifically, the fact that the party seeking certification pays for the certification analysis arguably creates an incentive to approve rather than deny certification. The public health risk created by the “certified organic” but salmonella-tainted peanuts stems at least in part from this inherent conflict. An alternative model of third party certification designed to reduce this conflict might require those seeking certification to pay into a fund administered by either the government or a third party, who would then be responsible for assigning a certifier to a particular project and paying that certifier from the fund. Such a system would generate additional administrative costs but could help alleviate the incentive to certify and the conflicts generated by the direct monetary relationship between the producer and the certifier.

Moreover, absent limitations on the role private certifiers play in other aspects of the market, additional conflicts of interest arise. For example, the credit rating industry has been heavily criticized for exploiting its certification role in order to gain monetary advantage. In addition to giving credit ratings to investment banks, some credit rating agencies were also advising these same banks on how to package securities in a way that would secure a favorable credit rating.¹⁵⁰ This opportunity for double dealing may be alleviated by the type of restrictions set for accredited certifier in the OFPA. Specifically, the OFPA mandates that certifying agents shall not

- (1) carry out any inspections of any operation in which said certifying agent, or employee of such certifying agent has, or has had, a commercial interest, including the provision of consultancy

¹⁴⁹ 7 C.F.R. § 205.300; 7 C.F.R. § 205.400.

¹⁵⁰ See Arthur Levitt, Jr., Former Chairman, U.S. Securities & Exchange Commission, Remarks to Dialogue with the OSC 2007 (Nov. 27, 2007) (transcript available at http://www.osc.gov.on.ca/Media/Speeches/2007/sp_20071127_sec-dwo-levitta.pdf) (commenting that “providing objective ratings and satisfying their corporate clients may be distorting the rating agencies’ judgment.”). See Associated Press, *SEC Hopes Rules for Credit-raters Cut Conflicts of Interest*, USA TODAY, Dec. 5, 2008 (reporting that new SEC rules specifically prohibit this type of behavior). Conflicts of interest within the credit rating industry led Senator Robert Menendez to comment that the credit rating agencies were “playing both coach and referee.” See Labaton, *supra* note 137.

services; (2) accept payment, gifts, or favors of any kind from the business inspected other than the prescribed fees; or (3) provide advice concerning organic practices or techniques for a fee, other than fees established under such a program.¹⁵¹

This type of limitation would likewise be important in limiting the potential for conflicts of interest of third party certifiers in the carbon offset market.

V. Conclusion

The time has come for some government oversight of the carbon offset market.¹⁵² Fashioning the appropriate type of government regulation and oversight for the offset market will be challenging, given the unique nature of the activity being regulated. If, in fact, a uniform system of certification is the best approach to regulating this market, creating a certification system that includes market stakeholders in the standards forming and implementing process offers a balance between market integrity and consumer protection on the one hand, and flexibility and innovation in the voluntary offset market on the other. Promoting market integrity and consumer confidence through an efficient certification process would help the offset market grow and achieve its full potential to help mitigate climate change.

¹⁵¹ 7 U.S.C. § 6515 (h) (2006) (Conflict of Interest).

¹⁵² GAO REPORT, *supra* note 15, at 37.

